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   Descrizione fisica   1 online resource (209 p.)

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   Soggetti   Electrical engineering
   Software engineering
   Communications Engineering, Networks
   Software Engineering/Programming and Operating Systems

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Description based upon print version of record.

   Nota di bibliografia   Includes bibliographical references at the end of each chapters.

   Nota di contenuto   Digital Health -- Requirements Engineering: Best Practice -- Laws and Regulations for Digital Health -- Ethical Issues in Digital Health -- Standards for Interoperability in Digital Health: Selection and Implementation in an eHealth Project -- User Experience (UX) Design for Medical Personnel and Patients -- Identifying Security Requirements and Privacy Concerns in Digital Health Applications -- How to Elicit, Analyse, and Validate Requirements for a Digital Health Solution -- Barriers and Strategies for Scaling Innovative Solutions in Healthcare.

   Sommario/riassunto   Healthcare and well-being have captured the attention of established software companies, start-ups, and investors. Software is starting to play a central role for addressing the problems of the aging society and the escalating cost of healthcare services. Enablers of such digital health are a growing number of sensors for sensing the human body and communication infrastructure for remote meetings, data sharing, and messaging. The challenge that lies in front of us is how to effectively make use of these capabilities, for example to empower patients and to free the scarce resources of medical personnel.

Requirements engineering is the process by which the capabilities of a software product are aligned with stakeholder needs and a shared understanding between the stakeholders and development team established. This book provides guide for what to look for and do when inquiring and specifying software that targets healthcare and well-being, helping readers avoid the pitfalls of the highly regulated and sensible healthcare domain are and how they can be overcome. This book brings together the knowledge of 22 researchers, engineers, lawyers, and CEOs that have experience in the development of digital health solutions. It represents a unique line-up of best practices and recommendations of how to engineer requirements for digital health. In particular the book presents: ·   The area of digital health, e-health, and m-health ·   Best practice for requirements engineering based on evidence from a large number of projects ·   Practical step-by-step guidelines, examples, and lessons-learned for working with laws, regulations, ethical issues, interoperability, user experience, security, and privacy ·   How to put these many concerns together for engineering the requirements of a digital health solution and for scaling a digital health product For anybody who intends to develop software for digital health, this book is an introduction and reference with a wealth of actionable insights. For students interested in understanding how to apply software to healthcare, the text introduces key topics and guides further studies with references to important literature.